LISTING OF THE CLAIMS:

This listing of the claims will replace all prior versions and listings of claims in the Application.

1-24. (Cancelled)

25. (Currently Amended) A system for producing ~~modeling~~ a sound field ~~produced by a sound source that generates a radiating sound field that comprises predetermined parameters~~, the system comprising:

means for receiving N signals that correspond to a received sound field emanating outwardly from within a predetermined geometric surface, wherein each of the N signals indicates one or more parameters of the received sound field at a separate one of N predetermined locations on the predetermined geometric surface;

~~N transducers, arranged to at least partially surround the sound source, for capturing the sound field and generating N signals that correspond to the captured sound field;~~

~~means for modeling the sound field based on at least some of the N signals, including selected ones of the predetermined parameters; and~~

~~means for selectively modifying one or more parameters of selected ones of the N signals to produce a modified sound field; and~~

M transducers, disposed ~~arranged to~~ at least partially within the predetermined geometric surface and oriented to emit sound outwardly through the geometric surface ~~surround an equivalent sound source, for emitting the modified sound field, the M~~

~~transducers being oriented away from the equivalent sound source so as to emit the modified sound field outwardly from the equivalent sound source;~~

means for driving the M transducers to emit an emitted sound field outwardly through the geometric surface such that one or more parameters of the emitted sound field at the N predetermined locations on the predetermined geometric surface correspond to the one or more parameters of the received sound field at the N predetermined locations on the predetermined geometric surface.

26. (Currently Amended) The system of claim 25, wherein the means for driving the M transducers comprises:

means for determining M inputs, wherein each of the M inputs corresponds to one of the M transducers; and

means for providing the M inputs to the corresponding ones of the M transducers ~~further comprising driver means for receiving N signals corresponding to the modified sound field and generating M signals to drive the reproduction of the modified sound field by the M transducers~~.

27. (Currently Amended) The system of claim 25 ~~26~~, further comprising ~~wherein the driver means is operable to~~ selectively ~~modify~~ modifying at least one of the one or more ~~of the~~ parameters of ~~selected ones of the N signals that correspond to~~ the received ~~modified~~ sound field at one or more of the N predetermined locations on the predetermined geometric surface ~~to generate the M signals~~.

28. (Currently Amended) The system of claim 27 ~~26~~, wherein the at least one of the one or more parameters of the received sound filed at one or more of the N predetermine locations that is selectively modified comprises one or both of a relative amplitude and an absolute amplitude ~~driver means is operable to independently modify one or more parameters of the selected ones of the N signals that correspond to the modified sound field to generate the M signals~~.

29. (Currently Amended) The system of claim 27 ~~25~~, wherein the at least one of the one or more parameters of the received sound filed at one or more of the N predetermine locations that is selectively modified comprises a directionality ~~means for selectively modifying is operable to independently modify one or more parameters of the selected ones of the N signals~~.

30. (Currently Amended) The system of claim 25, further comprising storing means for storing the M inputs ~~modeled sound field~~.

31. (Previously Presented) The system of claim 25, wherein M equals N.

32. (Currently Amended) The system of claim 25 ~~26~~, further comprising storing means for storing the ~~modified sound field, wherein the driver means receives~~ the N signals ~~corresponding to the modified sound field from the storing means~~.

33. (Currently Amended) The system of claim 26 ~~25~~, wherein the means for determining the M inputs determines the M inputs based at least in part on one or more of a position of one or more of the M transducers, an orientation of one or more of the M transducers, or an output profile of one or more of the M transducers ~~selectively modifying is operable to modify one or more parameters of the selected ones of the N signals based on at least one of a user preference, a loudspeaker compatibility, a predetermined module, and a preferred output arrangement~~.

34. (Currently Amended) The system of claim 26 ~~28~~, wherein the means for determining the M inputs determines the M inputs based at least in part on one or more of ~~driver means is operable to modify one or more parameters of the selected ones of the N signals corresponding to the modified sound field based on at least one of~~ a user preference, a user selection, or ~~a loudspeaker compatibility, a predetermined module, and~~ a preferred output arrangement.

35. (Currently Amended) The system of claim 25, wherein the means for determining the M inputs determines the M inputs based at least in part on one or more of ~~selectively modifying is operable to modify one or more parameters of the selected ones of the N signals based on at least one of~~ a recording environment or ~~and~~ a playback environment.

36. (Previously Presented) The system of claim 28, wherein M is greater than or less than N ~~the driver means is operable to modify one or more parameters of the~~

~~selected ones of the N signals corresponding to the modified sound field based on at least one of a recording environment and a playback environment~~.

37. (Currently Amended) A method for producing ~~modeling~~ a sound field ~~generated by a sound source that generates a radiating sound field that comprises one or more predetermined parameters~~, the method comprising:

~~capturing the sound field using N transducers that are arranged to at least partially surround the sound source;~~

~~generating~~ obtaining N signals that correspond to an obtained ~~the captured~~ sound field emanating outwardly from within a predetermined geometric surface, wherein each of the N signals indicates one or more parameters of the obtained sound field at a separate one of N predetermined locations on the predetermined geometric surface;

positioning M transducers at least partially within the predetermined geometric surface;

orienting the M transducers to emit sound outwardly through the geometric surface; and

driving the M transducers to emit an emitted sound field outwardly through the geometric surface such that one or more of parameters of the emitted sound field at the N predetermined locations on the predetermined geometric surface correspond to the one or more parameters of the obtained sound field at the N predetermined locations on the predetermined geometric surface

~~modeling the sound field based on at least some of the N signals, including selected ones of the predetermined parameters;~~

~~modifying one or more parameters of selected ones of the N signals to produce a modified sound field; and~~

~~emitting the modified sound field using M transducers that are arranged to at least partially surround an equivalent sound source, the M transducers being oriented away from the equivalent sound source so as to emit the modified sound field outwardly from the equivalent sound source~~.

38. (Currently Amended) The method of claim 37, further comprising:

determining M inputs, wherein each of the M inputs corresponds to one of the M transducers ~~receiving N signals corresponding to the modified sound field~~; and

providing the M inputs to the corresponding ones of the M transducers ~~driving the emission of the modified sound field by the M transducers based on the received N signals~~.

39. (Currently Amended) The method of claim 37 ~~38~~, further comprising selectively ~~and independently~~ modifying at least one of the one or more parameters of ~~selected ones of the received N signals that correspond to~~ the obtained ~~modified~~ sound field at one or more of the N predetermined locations on the predetermined geometric surface.

40. (Currently Amended) The method of claim 38 ~~37~~, further comprising storing the M inputs ~~modeled sound field~~.

41. (Currently Amended) The method of claim 37, further comprising storing the N signals ~~modified sound field~~.

42. (Currently Amended) The method of claim 39 ~~37~~, wherein selectively modifying the at least one of the one or more parameters of the obtained sound field ~~selected ones of the N signals~~ comprises independently modifying one or more ~~parameters of the selected ones~~ of the N signals.

43. (Currently Amended) The method of claim 39 ~~37~~, wherein selectively modifying the at least one of the one or more parameters of the obtained sound field ~~selected ones of the N signals~~ comprises modifying one or more ~~parameters~~ of an absolute volume or a relative volume ~~the selected ones of the N signals based on at least one of a user preference, a loudspeaker compatibility, a predetermined module, and a preferred output arrangement~~.

44. (Currently Amended) The method of claim 39, wherein selectively modifying the at least one of the one or more parameters of the obtained ~~selected ones of the received N signals corresponding to the modified~~ sound field comprises modifying one or more parameters of the obtained ~~selected ones of the received N signals corresponding to the modified~~ sound field based on ~~at least~~ one or more of a user preference, a loudspeaker compatibility, a predetermined module, or ~~and~~ a preferred output arrangement.

45. (Currently Amended) The method of claim 39 ~~37~~, wherein modifying the at least one of the one or more parameters of the obtained sound field ~~selected ones of the N signals~~ comprises modifying one or more parameters of the obtained sound field ~~selected ones of the N signals~~ based on ~~at least~~ one or more of a recording environment or ~~and~~ a playback environment.

46. (Currently Amended) The method of claim 39, wherein M is less than or greater than N ~~modifying one or more parameters of the selected ones of the received N signals corresponding to the modified sound field comprises modifying one or more parameters of the selected ones of the N signals corresponding to the modified sound field based on at least one of a recording environment and a playback environment~~.

47. (Previously Presented) The method of claim 37, wherein M equals N.